

# **\*\*ATTENTION\*\***

*This document is provided for historical purposes only.*

*Documents contained in the Washington Department of Fish and Wildlife Document & Publication Archive may contain dated and/or incorrect information. The WDFW Document & Publication Archive is provided as a service to those interested in the history of fish and wildlife management in Washington State.*



**U**rban Wildlife Series  
Washington Department of Wildlife

# WINTER BIRD FEEDING

Winter can be a very difficult time for wildlife. Most young animals don't survive their first season of cold winds and low food supplies. This has been and always will be a part of the natural cycle. However, some of the hardships wildlife faces today come from changes in habitat brought about by human activities. Cities and towns have replaced the trees and shrubs where wildlife used to find food and

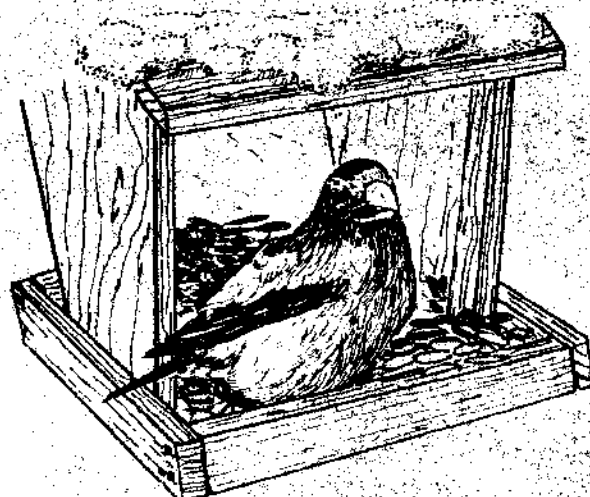
shelter. These changes have made survival even more difficult for many species of urban birds.

A winter feeding program is one way to lessen the harmful effects of urban development on wildlife. This booklet describes some good ways to feed birds, avoid problems, and enhance your enjoyment of backyard wildlife.

## Birds At Your Feeder

Biologists have conducted "taste tests" with birds. They have found that birds, like people, have preferences for different kinds of food. These foods can be offered selectively to help attract or discourage certain birds. They can also be used in combinations to attract a variety of visitors to your feeder.

The table below shows the preferred foods of some of Washington's most common winter birds.



	White proso millet	Red proso millet	Milo	Oil-type sunflower	Black-striped sunflower	Hulled sunflower	Peanut kernel	Peanut heart	Canary seed	Thistle (niger seed)	Fine cracked corn	Oats	Suet
California Quail	+	+	+								+		
Rock Dove (pigeon)	+	+	+								+		
Mourning Dove	+	+		+							+		
Woodpeckers							+						+
Steller's Jay				+									+
Chickadees				+									+
Bushtit													+
Nuthatches													+
Wrens													+
Starling			+					+				+	
House Sparrow	+					+			+		+		
Evening Grosbeak				+	+								
House Finch	+			+		+							
Pine Siskin				+		+							
American Goldfinch	+	+		+	+	+				+			
Rufous-sided Towhee	+												
Dark-eyed Junco	+								+				
White-crowned Sparrow	+			+									
Song Sparrow	+												

# Kinds of Food

## SEED

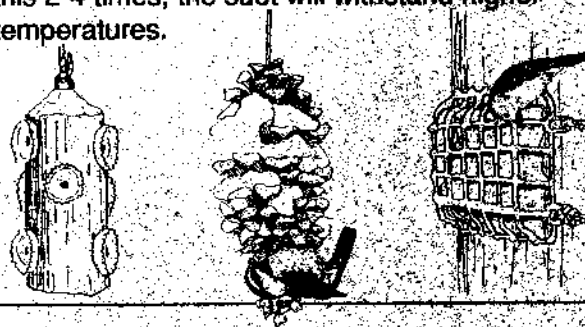
Seeds are the most common food provided at feeding stations. They are rich in carbohydrates and calories and supply valuable energy during cold weather. However, many seeds and grains in commercial mixes—buckwheat, rice, sorghum, oats, rape, flax, and wheat—are ignored and scattered on the ground by most birds while searching for seeds they like. This creates a mess, increases your feeding costs, and can attract rats and mice. Mixes with unattractive seeds should be avoided.

The two best all-around seeds are white proso millet and black oil-type sunflower seeds. These two kinds of seed best meet the needs of most seed-eating birds. Thistle seed, also called niger, is generally eaten only by siskins and goldfinches, but they love it!

It's best to avoid mixtures and to buy seed varieties separately. You can put each in different feeders so the birds can choose their favorite. You can find seeds at feed stores, mail-order outlets (some are listed on page 8), and often through local Audubon Society chapters.

## SUET

During the winter months, many insect-eating birds are forced to change their eating habits to include seeds and fruits. Suet provides an alternate source of food for these birds. Suet is the hard fat surrounding cattle and sheep kidneys. It can be obtained at grocery stores and meat markets, often free of charge. Fat from steaks or burgers (don't use bacon fat—it often has too many harmful chemicals) can also be used, but avoid salt and seasonings. Suet, either "straight" or mixed with other ingredients, can be put in mesh bags or smeared into suet logs and crevices of pine cones. If your suet starts to melt or become rancid on warmer days, try melting the suet, then let it harden in the freezer. After repeating this 2-4 times, the suet will withstand higher temperatures.



### OUR FAVORITE SUET RECIPES

#### **Basic formula**

Heat to boiling 1 part suet and 6 parts water. Add 2 parts cornmeal, 1/2 part flour, 1 part brown sugar.

Cool, pour into cupcake molds, and allow to harden.

#### **A standard mix**

Twice melt 2 parts suet, allowing it to harden between melts.

Blend in 1 part yellow cornmeal and 1 part peanut butter.

Allow to thicken; pour into molds, allow to harden.

The relative proportions of these ingredients may vary depending on your preferences.

#### **Suet mix**

Mix 1-1/2 parts ground wheat bread, 1 part hulled sunflower seeds, 1/2 part millet, 1/2 part dried & chopped fruits.

Melt 9 parts suet.

Blend dry ingredients into suet as it cools.

#### **Veggie-suet mix (no "meat")**

Boil 2 Cups water, 1 TBLS butter, 1 TBLS sugar, and 2 TBLS cinnamon.

Add 1 Cup oatmeal, 1/2 Cup raisins.

Stop here; have breakfast, or continue:

Blend into warm oatmeal mixture and mix well:

1/2 Cup corn meal, 1/2 Cup whole wheat flour,

1/2 Cup millet, 4 Cups crunchy peanut butter.

Can be molded to tree branch.

Refrigerate all leftover mixtures.

## NUTS & PEANUT BUTTER

Nuts are rich in protein and minerals. Peanuts, pecans, walnuts and others are most attractive to birds when shells are cracked or opened and meats are chopped.

Kids aren't the only ones who love peanut butter. When mixed with other foods, it provides a less expensive meal than nuts. In winter when protein and fat are scarce, peanut butter is a valuable addition to a bird's diet. Try mixing nuts, peanut butter, crumbs, and raisins with melted suet for a meal-in-one "bird cake" which appeals to a variety of birds.



## Bird Feeders

Seeds can be put in a variety of containers and placed in different parts of the yard. Birds such as towhees, juncos, and sparrows prefer to look for a meal on the ground. Scattering seeds amid leaves and ground litter will cater to their preferences. Other birds prefer feeders placed off the ground.

## TYPES OF FEEDERS

Bird feeders can be built using household items such as milk cartons, plastic bottles, coconut shells, wicker baskets, plastic newspaper tubes, or wooden salad bowls. Lumber scraps, stumps, small hollow logs, and pine cones can also serve as feeders.

You can control what kinds of birds come to your bird feeders by the type of feeder you use. To discourage starlings, crows, and house sparrows, for example, you can use selective feeders. These feeders are small

## FRUITS

This specialty item can often attract birds that otherwise aren't interested in your feeders. Waxwings, robins, and thrushes may visit a feeding station if fruit or berries are offered. Fresh or dried apples, blueberries, cherries, cranberries, currants, dates, oranges, grapes and raisins are popular fruits. Your yard should also have berry-producing trees and shrubs.

## BAKERY GOODS

Bread, crackers, and doughnuts should be avoided or only used with care. Often they attract starlings, house sparrows, and pigeons which can quickly become nuisances or harm our native birds. Bakery goods will also attract rats and mice if too much is provided for birds. Never use bakery items if they are moldy.

and have short perches or no perches at all. They invite smaller, more agile birds such as chickadees and nuthatches while discouraging the larger starlings, house sparrows, and crows. *Nonselective* feeders are larger and have an ample perching area. They invite all birds regardless of their size and dexterity. If you have problems with large birds taking over a feeder, try one of the selective feeders designed just for small birds.



Whether you build your own or purchase one, feeders come in several different styles:

## HOPPERS

Hoppers release food as it is eaten. Seed is funnelled to a bottom tray where birds perch. Plastic or glass sides show the seed level. Hoppers provide a stable perch that can be mounted on posts, platforms and windowsills, or hung from branches and eaves. Sometimes a hopper feeder is mounted on a pulley strung between a tree and a window, allowing the feeder to be "reeled in" for refills or to get shy birds to come closer to the house. Because they store and release seed as it's used, hoppers offer a consistent food source with little maintenance. However, be sure the seed is not getting moldy if it is in the feeder for more than a few days.

## TUBE FEEDERS

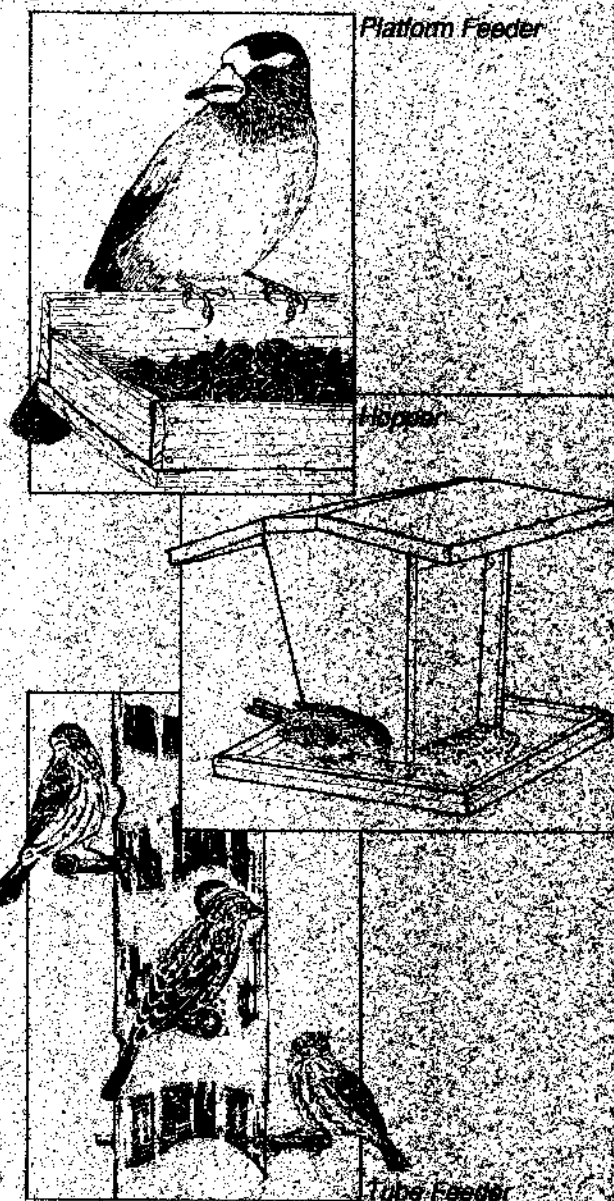
Tube feeders are cylinders that store and release seed at several feeding outlets with adjacent perches. The larger types hold enough seed to last for several days, and the clear plastic makes it easy to see when a refill is needed. Because they hang freely from branches and house eaves, tube feeders are well suited to chickadees, house finches and other small birds. The unsteadiness and limited perching space discourage larger, more aggressive birds. Tube feeders can be made even more selective by shortening the perch to 1/2 inch or so. Goldfinches and siskins are attracted to special tube feeders with slit-like openings allowing thistle seeds to be taken one at a time.

## PLATFORM FEEDERS

Platform feeders provide a spacious, stable perch where food can be spread out for several birds at a time. A rim around the edge reduces spilling and prevents food from being blown away. These feeders can be mounted at various heights on posts, windowsills, decks, and other structures. Anything can be put in a platform feeder—seeds, suet, and fruits. Because of their size, platform feeders are nonselective and inviting to any and all birds.

## SUET FEEDERS

Suet feeders hold chunks of hard beef or mutton fat to prevent birds from flying away with large pieces. Commercial suet feeders are available, but simple homemade styles are just as effective. Hardware cloth and mesh onion or orange bags hold hard chunks, while softened suet can be pressed into pine cones or into holes drilled in small logs. Suet can be given to larger woodpeckers in a mesh container fastened to a large branch or tree trunk. Suet feeders can be hung at least 5 feet off the ground so squirrels and other mammals can't get to them.



## PLACEMENT

Feeder placement should allow you to watch birds without being so close that your movements scare them away. Use a location as quiet and undisturbed as possible—away from traffic, noisy pets and house entrances. Feeders placed near a sliding window allow comfortable viewing and easy refilling. Don't hang a feeder so high that refilling it is too much trouble.

Be careful of window reflections. Many birds are killed by flying into invisible windows. Close your curtains during the time of day when reflections are highest. You can place feeders to the sides of windows but still visible to you.

## MAINTENANCE

Keep your feeders clean and free from mold. *Seeds must be kept dry*, otherwise, they may spoil and become poisonous to birds. Periodically remove all seed, fruit, etc. and dry and air out feeders. Do not use cleaners such as Lysol or Pinesol that are toxic to birds.



## How Much To Feed

If too many birds are concentrated in a small area, they may suffer from stress and increased exposure to diseases. This can happen if too many feeders and an overabundance of food are placed in a single backyard. A large concentration of birds may also attract predators and cause problems with neighbors.

Moderation is the key. Remember that one reason you feed birds is to replace the food that was lost when your property was developed. Going beyond this with too much kindness may not be favorable to the welfare of the birds.

Don't forget these important items...

### GRIT

Songbirds have no teeth with which to chew their food. Instead, they grind it up with grit—small pieces of sand, gravel and other such material. Grit collects in a bird's gizzard and acts like tiny millstones. It also contains calcium and other minerals. Fine gravel, sand, ground eggshell, and small pieces of oyster shell make excellent grit. Grit is found in pet stores, or you can make your own.

### WATER

A clean, reliable supply of water for drinking and bathing, even in winter, is essential. Clean feathers are necessary for insulation against the cold.

Water basins for songbirds should have gently sloping sides, rough-textured surfaces for secure footing, and average depths no greater than 1.5 inches. Avoid lead-lined bird baths because lead dissolves in water and is highly poisonous.

During the coldest months, use a heating element in your bird bath to keep the water ice-free. Submersible heaters can be purchased in some pet stores or mail-ordered. As an alternative, place your bird bath over an empty flower pot that has a light bulb in it; the heat from the bulb will keep the water ice-free.

## When To Feed

It's best to start putting out food around the middle of October. Natural food is becoming hard to find then, and what's available will be used up through the winter. It's best to continue feeding through February and March when food supplies are lowest.

There is a notion that once you start feeding birds you need to continue without interruption—otherwise the birds that have become dependent on your feeder will starve. It's more likely that backyard birds visit a number of feeders in their daily search for food. If yours is empty, they'll just go to their next stop. The biggest problem in interrupting a feeding program is getting the word out to the birds once you resume feeding.

## Solutions to Some Feeder Problems

<b>Household CATS stalk- ing birds at your feeder</b>	<ul style="list-style-type: none"> <li>◆ leave 15-20 feet between feeder and shrubs so birds can see lurking cats</li> <li>◆ place feeder close to a tree for quick escape</li> <li>◆ put 2-3 bells on the cat's collar</li> <li>◆ cat owners who are "environmentally aware" keep their cats indoors - it's best for the birds and for the cats</li> </ul>	<b>If it's not your cat:</b> <ul style="list-style-type: none"> <li>◆ talk to the cat owner and ask for cooperation</li> <li>◆ call your city/county animal control officer, especially if your community has a leash law for cats</li> <li>◆ trap the offending cat in a harmless live-trap, then return it to its owner, local animal shelter or humane society (note: some communities may not allow the use of traps for cats - check with city &amp; county officials)</li> </ul>
<b>Too many STARLINGS and HOUSE SPARROWS in your yard</b>	<ul style="list-style-type: none"> <li>◆ use selective feeders such as tube feeders with small perches (approximately 1/2 inch long) and small seed openings</li> <li>◆ hang feeders with string or wire so they twirl and sway</li> <li>◆ use unhulled sunflower seeds</li> <li>◆ avoid table scraps, bakery goods, peanut hearts, wheat, oats, and large amounts of bird seed</li> </ul>	<ul style="list-style-type: none"> <li>◆ avoid large platform feeders and ground feeding</li> <li>◆ purchase a feeder with a counterbalanced perch (weight of heavy bird causes platform to come between it and bird food)</li> <li>◆ use suet feeders where the only access to food is by hanging upside down</li> </ul>
<b>PIGEONS</b>	<ul style="list-style-type: none"> <li>◆ avoid large amounts of seed placed in large, open trays or on the ground</li> </ul>	<ul style="list-style-type: none"> <li>◆ cover all perch sites (especially under eaves), or make them unusable</li> </ul>
<b>RATS and MICE</b>	<ul style="list-style-type: none"> <li>◆ provide only as much seed to ground-feeding and platform-feeding birds as they can eat during the day</li> </ul>	<ul style="list-style-type: none"> <li>◆ clean up all spilled and left over seed</li> <li>◆ avoid using seed mixtures (birds discard unwanted seeds)</li> </ul>
<b>SQUIRRELS raiding your feeders</b>	<ul style="list-style-type: none"> <li>◆ hang several pie pans, metal lids, or phonograph records horizontally up and down the supporting wire of hanging feeder, spaced with short sections of garden hose or plastic tubing; these will tip when a squirrel steps on them</li> <li>◆ suspend hanging feeder from wire stretched between two trees; put plastic tubing around wire on either side of feeder (tubing will rotate around the wire when a squirrel steps on it); see pg. 8</li> </ul>	<ul style="list-style-type: none"> <li>◆ for feeders on poles, wrap a piece of rigid sheet metal, pie pan, or other such material around the pole to form a cone at least 5 feet from ground; grease the pole</li> <li>◆ make sure feeders atop poles are at least 5 feet above ground and 8 feet from nearest tree (squirrels are great jumpers!)</li> <li>◆ hang feeders with wire that squirrels can't chew through</li> <li>◆ look for special feeder designs in mail-order catalogues</li> </ul>

## HAWKS

Many birds concentrated around a feeder may attract a hawk or two, especially in winter. During the lean months hawks must sometimes venture into urban areas in search of a meal in order to survive. They too feel the sting of winter. The occasional foray of a sharp-shinned or Cooper's hawk into your yard should be seen as a gift rather than a problem.

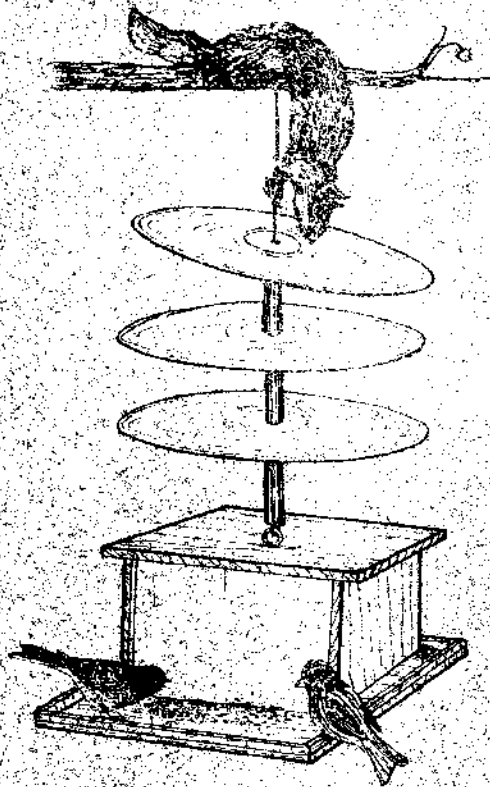
A hawk hunting in your yard indicates a healthy functioning system. Healthy songbirds will take cover in surrounding trees and shrubs.





## References

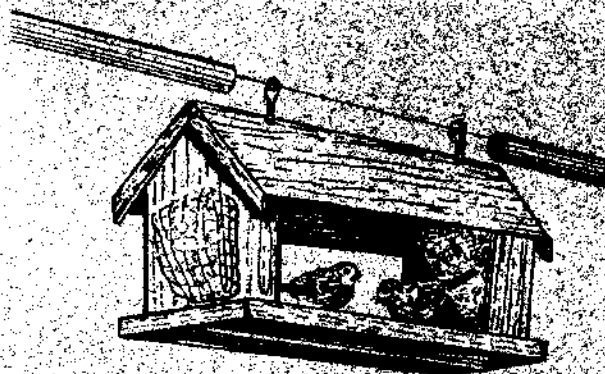
- A Complete Guide to Bird Feeding* by John Dennis, 1982  
*Attracting Backyard Wildlife* by Bill Merillees, 1989  
*Feeding the Birds* by Jan Mahnken, 1983  
*Feeding Wild Birds in Winter* by Clive Dobson, 1981  
*How to Attract Birds* by Ortho Books, edited by Ken Burke, 1983  
*The Audubon Society Guide to Attracting Birds* by Stephen Kress, 1985



## Mail Order Catalogues

- Hyde Bird Feeder Company  
 P.O. Box 168  
 Waltham, MS 02254  
  
 Audubon Workshop  
 1501 Paddock Drive  
 Northbrook, IL 60062  
  
 The Feeding Station  
 P.O. Box 1027  
 Sequim, WA 98382

Many more are advertised in *Bird Watcher's Digest*, *Audubon Magazine*, *Natural History*, and others; check your library or magazine rack.



This urban wildlife publication was developed by the Washington Department of Wildlife's Nongame Program and Wildlife Education Program. It is available for sale of personalized license plates. Please let your local wildlife agency know about this publication.

Written by Stephen Barland and Donna Blomquist  
 Designed and Produced by Patricia Thompson

First printing 10/90 15K

The Department of Wildlife will provide equal opportunities to all potential and existing employees without regard to race, creed, color, sex, sexual orientation, religion, age, marital status, national origin, disability, or Vietnam Era Veteran's status.

The department receives Federal Aid for fish and wildlife restoration. The department is subject to Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of race, color, national origin or handicap. If you believe you have been discriminated against in any department program, ability, priority, or if you want further information about Title VI or Section 504, write to: Office of Equal Opportunity, U.S. Department of Interior, Washington, D.C. 20240, or Washington Department of Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091.

## Washington Department of Wildlife



Serving Washington's  
 wildlife and people  
 now and in the  
 future